City of Edmonton

HOUSING MARKET REPORT 1986

PLANNING AND
BUILDING DEPARTMENT
July, 1986

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INTRODUCTION

This report is an examination of the present and future Edmonton housing market and the implications for the City of Edmonton. Within the study, there is a focus on projections and market activity, all in relation to the City's interest in housing and residential land development.

This report has two purposes:

- to provide a consistent analysis and forecast of housing activity for use within the City of Edmonton civic administration;
- to provide housing related data to the development and building industry.

The need for this examination arises out of the considerable turbulence experienced by Edmonton's housing market in recent years. As indicators of this turbulence, housing starts peaked at 14,668 in 1978 and declined by 87% to 1,970 in 1985. Servicing of residential land, as measured in potential dwelling units, declined from 12,094 units in 1980 to 698 units in 1985. Mortgage rates have been high and then dropped significantly, lowering the carrying costs of home ownership. Rental vacancy rates went from 1.6% in 1981 to 9.5% in October 1984 to 4.4% in October 1985.

The City is interested in these rapid changes in the housing market for a number of reasons. First, the City has substantial residential holdings and wishes to market its land without adverse impacts on the private housing sector. Second, there are demands for additional municipal services for new suburban housing developments which have cost implications for the City. Finally, in the current economic circumstances, the City should ensure its policies and activities do not hinder the contribution housing can make to economic growth.

The completion of this report was delayed until the second quarter of 1986 because of the uncertainty created in Alberta by the significant fall in world oil prices during early 1986. The City Forecast Committee, which is responsible for preparing socio-economic forecasts for use in the Civic Administration, prepared preliminary socio-economic forecasts in February and subsequently revised them in May. The Housing Market Report was delayed until the general Alberta and Edmonton forecasts were finalized and could then be incorporated in this report.

PART 1 - HOUSING DEMAND

Among the most significant variables affecting the demand for housing are demographic factors including population, age structure and household changes. This part of the report discusses these variables, examines household formation trends and provides a forecast of the expected number of households and associated housing requirements as they are influenced by economic conditions.

1.1 Population

Past Population Growth

- The City of Edmonton population is estimated to be 573,000 in 1986.
- Over the nine year period 1976 - 1985, Edmonton's population grew by 106,000 or an average annual rate of 2.4% (Table 1.1).
- Growth between 1985 - 1986 was estimated to be approximately 5,000 persons or 0.8%.

Population Projections

- The population growth rate to 1989 is forecasted to be approximately 1% per year (see Table 1.2). This increase, although substantial, represents a growth rate of less than half the 2.4% per year increase over 1976 - 1985.
- The fall-off in the population growth rate results from a significant reduction in the amount of the forecasted net migration (in-migration minus out-migration) to Edmonton. During 1976 - 81, net migration averaged 7,600 persons per year (Planning Department, 1982). However, with the economic downturn in 1982 - 1983, net migration became negative. The projections in Table 1.2 use the following figures for net migration per year (Planning and Building Department, 1986):

1984	-4,000
1985	-1,700
1986	-1,200
1987	900
1988	1,500
1989	2,100

1.2 Age Distribution

The population age distribution is important from a housing perspective because different age groups generally have differing housing requirements. Young adults in the 20 - 24 age group generally seek rental accommodation while persons in the family formation years of 25 - 34 are usually in search of their first home purchase. Persons in the middle years from 35 to 54 traditionally consider a move-up in housing quality. (Gruen, et al, 1983, p. 17).

Past Age Distribution

- During 1976 - 1981, 90% of total in-migrants were in the 20 - 34 age group, creating a large demand for rental accommodation and new homes.

- During 1976 - 1983, the 20 - 34 age group accounted for 70% of the total population increase.

- Within this age group, the 25 - 34 category increased by 54,000 people and raised its share of the total population from 16% to 22%. This group created a major bulge in the age structure (Table 1.2).

Future Age Distribution

- The population bulge created in the 20 - 34 age group between 1976 - 1983 will continue to affect household formation and housing demand well into the future.

- Short term changes to 1987 include an increase of 3,800 people in the 35-44 age group and smaller increases in the 0-19 and 25-34 age groups. The 20-24 age group declines by some 3,300 persons.

- In the period to 1989, the 20-24 age group declines by 9,000 (10% of total), the 25-34 age group remains stable while the 35-44 age group increases by 13,000 (15% of total). The population bulge remains in the 25-34 age group which has 21% of the total population. The +65 age group increases by 9,000 persons. (Table 1.2)

- These changes in the age distribution of the population, assuming no significant economic changes, could have the following impacts on housing:

    - the decline in the 20-24 age group would create a generally soft rental market;

    - the lack of growth in the 25-34 age group would provide little strength for the first-time buyer market;

    - the strong growth in the 35-44 group would suggest that the move-up market has the potential for demand increases.

    - the growth in the +65 age group could create an ongoing demand for seniors housing.

However, as discussed below and in section 1.3, economic conditions will significantly influence these demographic considerations.

1.3 Household Changes

With lower population growth, an aging population profile and slower economic growth, household growth in Edmonton will be considerably lower than experienced over 1976 - 83 and household characteristics will change.

Past Household Changes

- Between 1976 - 1986, 58,000 new households were created in Edmonton, an average of 5,830 per year, bringing the total number of households to approximately 214,000 in 1986.

- The number of persons per household declined from 2.89 in 1976 to an estimated 2.69 in 1986.

- Non-family households in the Edmonton area increased by 136% over 1971 - 1981, while family households increased by 42%.

- These trends were largely the result of increases in the 20 - 34 age group who have a tendency to live in smaller, non-family households as well as economic factors such as increasing affordability.

Future Household Changes

The relationship between the population/age profile and household formation can be explored by a technique which calculates the likelihood that individuals in particular age groups are the head of a household (headship rates).

A study of household formation and headship rates in Canada (Smith, 1984), found that the large increase in the number of households since 1961 was due mainly to increases in non-family households (single-person households and households of unrelated persons). This growth of non-family households was facilitated primarily by an increasing real affordability and availability of housing. Other influencing factors include an increase in the numbers of young adults and social trends such as the increase in divorce rates. Economic variables were found to influence housing demand of all age groups but were of particular impact on the youngest age group (15-24).

In view of these conclusions on the relationship between economic variables and headship rates, the City's recent economic forecasts are significant (City of Edmonton, Forecast Committee, 1986). The key findings of the forecasts are:

- Real growth of the Alberta economy over 1986-1989 will average 2.1% compared to 2.9% over 1978-1984.

- Edmonton's unemployment rate will average 11% over 1986-1989 compared to 7.3% over 1978-1984.

- Real interest rates (prime rate minus consumer price increases) will be higher (6.6% over 1986-1989) than over 1978-1984 (5.1%).

The combined impact of slower economic growth, persistent high local unemployment and high real interest rates is expected to reduce headship rates over the next several years, especially in the under 35 age groups. (Table 1.3)

These expectations are incorporated in the age-specific headship rates as projected in Appendix 1. The bulk of the reduction in headship rates is concentrated in 1986 and 1987 in the younger age groups. Smaller reductions apply to the older age groups because of their greater economic security. The key features of the forecasts include:

- In the period 1986 to 1987, approximately 2,300 new households will be formed and average persons per household will be 2.69 persons per unit.

- In the period from 1987 to 1989 there will be an increase of approximately 3,300 households per year and persons per household will decline slightly to 2.67. However, as noted in Appendix 1, in the early years, the increase is much smaller and rises later in the forecast period.

- The projections indicate a significant decline in the rate of household formation compared with recent years:

Period	Average Number of New Households Per Year
1976 - 1986	5,830
1986 - 1987	2,300
1987 - 1989	3,300

- The household formulation projections from Table 1.3 and Appendix 1 are combined with an assessment of economic factors to prepare the housing starts forecast in Section 4.

Table 1.1

City of Edmonton, Population 1976 - 1986

Year	Population	Increase	Percentage Increase
1976	461,559		
		9,915	2.2
1977	471,474		
		6,592	1.4
1978	478,066		
		13,293	2.8
1979	491,359		
		14,414	2.9
1980	505,773		
		15,432	3.1
1981	521,205		
		30,109 [1]	5.8
1982	551,314 [1]		
		8,771	1.6
1983	560,085		
		3,915	0.8
1984	563,000		
		4,773	0.8
1985	567,773		
		5,003	0.9
1986	572,776		

Source: 1983 Civic Census, City of Edmonton
1984-1986, Planning and Building Department, Estimates

[1] Includes annexation, 8,719 persons (not including institutional population)

Table 1.2

City of Edmonton, Population Projection and Age Distribution, 1983-1989

Age Group	Observed [1] 1976 Population	%	1981 Population	%	1983 Population	%	Projected [2] 1986 Population	%	1989 Population	%
0 - 19	160,100	35	145,190	28	159,499	28	158,870	28	165,891	28
20 - 24	59,010	13	74,786	14	77,373	14	68,327	12	59,244	10
25 - 34	74,885	16	112,286	22	123,318	22	127,847	23	127,556	21
35 - 44	51,415	11	60,348	12	66,663	12	75,155	13	88,292	15
45 - 54	48,875	11	50,895	10	52,668	9	51,511	9	52,737	9
55 - 64	33,800	7	38,808	7	41,149	8	45,103	8	45,800	8
65 +	32,920	7	38,892	7	39,415	7	45,969	8	54,677	9
TOTAL	461,055	100	521,205	100	560,085	100	572,776	100	594,193	100

[1]Source: Civic Census, City of Edmonton, various years
[2]Source: Corporate Forecasting Group, Planning and Building Department, City of Edmonton, 1986

Note: Totals may not add as a result of rounding.

Table 1.3

City of Edmonton, Household Growth, 1983-1989

Age Group	Observed 1983 Population	Headship Rate	Households[1]	Projected 1986 Population[2]	Headship Rate	Households	1989 Population[2]	Headship Rate	Households
15 - 24	123,106	.245	30,161	106,495	.230	24,494	96,579	.219	21,151
25 - 34	123,318	.515	63,509	127,847	.507	64,818	127,556	.503	64,161
35 - 44	66,663	.555	36,998	75,155	.550	41,335	88,292	.547	48,296
45 - 54	52,668	.565	29,757	51,511	.564	29,052	52,737	.562	29,638
55 - 64	41,149	.575	23,661	45,103	.574	25,889	45,800	.571	26,152
65 +	39,145	.600	23,649	45,969	.599	27,535	54,677	.596	32,587
TOTAL	446,319	.465	207,735[1]	452,080	.470	213,123	465,641	.477	222,985

Source: City of Edmonton, Planning and Building Department, 1986

[1]Approximate households based on actual population figures.
[2]Planning and Building Department Forecasts, 1986.

PART 2 - HOUSING SUPPLY

This part of the report outlines housing supply components including existing housing stock, new housing additions, housing absorptions, residential demolitions, units under construction, residential land supply and servicing activity.

2.1 Housing Stock

The growth rate in housing stock over 1976 - 1985 (+42%) and households (+36%) has been large and has been considerably in excess of the population increase (+23%), reflecting the trend towards smaller households in Edmonton.

- The total number of housing starts over 1976 - 1985 in Edmonton was 82,735 or an average of 9,192 units per year (Table 2.1).
- Total starts over 1976-1985 were comprised of 41% apartment unit starts, 39% single family and 20% ground related multiples.
- Figure 1 shows that residential housing starts have fluctuated considerably from year to year both in quantity and type.

2.2 New Housing Starts

- Housing starts in 1985 totalled 1,970, (1,890 singles, 80 multi's), a 5% increase from the 1984 total (Figure 2).
- Most housing starts were located in the North (27%), West (30%), and Southwest (27%) sectors of the City (Map 1), a distribution similar to that of 1984.
- Starts to April 1986 totalled 656 (625 singles and 33 multi's). During the same period in 1985, only 409 units were started (381 singles, 25 multi's).

2.3 Housing Absorption

Housing absorptions are the number of new units which are occupied each year. The number includes all housing completions in a particular year plus (or minus) the change in housing units which are completed and unoccupied between January 1 and December 31 of the year (Figure 3).

- Each year since 1981, more units have been absorbed than started reducing the inventory of newly completed and unoccupied units from 2,277 units in December 1981 to 138 units in December 1985 (Table 2.2).
- Absorption of multiple-family units averaged 6,600 a year during 1982 and 1983. In 1984 however, absorption dropped to 1,600 units, and to only 407 units in 1985.
- Absorption of single family units has ranged between 2,600 and 3,000 units each year between 1982 and 1984. In 1985 however, absorption dropped 38% to 1,538 units. This indicates that demand for new housing units has declined from previous levels.

2.4 Residential Demolitions

A number of housing starts can be considered as replacement stock for residential demolitions.

- Between 1976-1984 demolitions totalled 3,383 units or 423 units per year average, with 84% single family units.

- Demolitions in 1985 totalled 116 units, 83% of which were single family units.

2.5 Housing Units Under Construction

The number of units presently under construction indicates the volume of units which will soon be on the market.

- Total units under construction in December 1985 was 600 (569 single family, 31 apartments). This figure has been constantly declining from a high of 7,700 units in July of 1982 as a result of the rapid decline in the number of apartment units under construction and the lack of speculative building.

2.6 Residential Land Supply

The supply of vacant residential land in suburban areas is an important aspect of housing supply and is summarized in Table 2.3 (City of Edmonton, Planning and Building Department, 1986). City sectors are shown on Map 1.

One of the critical aspects of residential land supply is the supply of subdivided and serviced lots for single family units.

- There is a supply of 5,545 of serviced, single family lots City-wide.

- The supply of subdivided and serviced lots for single family units ranges from 462 - 2,248 units in the various City Sectors, while serviced land for multi-family housing (measured in units), ranges between 1,500 units and nearly 11,000 units (Figure 4).

- In addition to the serviced land supply, there is a large amount of unserviced, unsubdivided land in approved Area Structure Plans. This supply can accommodate 40,000 single family lots. On a sectoral basis, the supply ranges from 1,800 lots in the West to 16,000 lots in the North. The unserviced land is sufficient for 32,000 multi-family units. On a sectoral basis, the supply ranges from 1,100 units in the West to 15,500 units in the North.

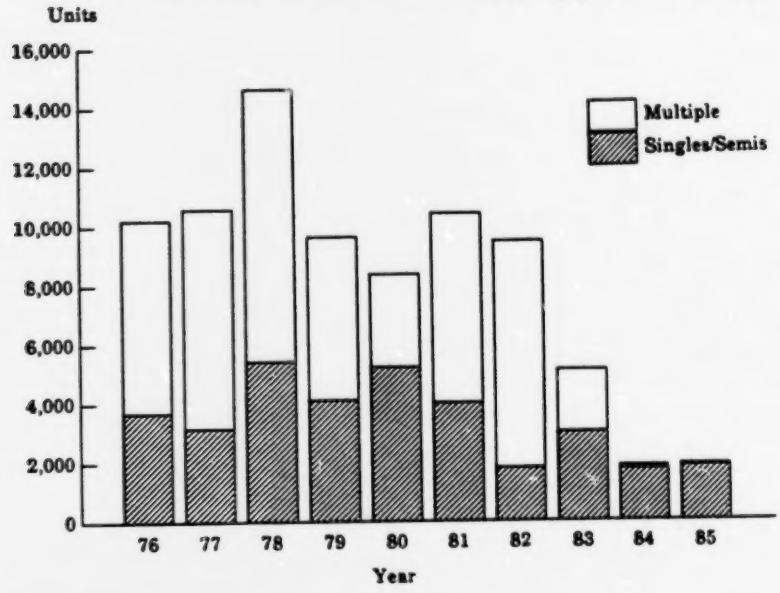
2.7 Residential Servicing

In addition to the supply of subdivided and serviced lots specified in Table 2.3, a number of lots for single family units are serviced each year.

- In 1985, 698 single family lots were serviced compared to 329 in 1984. This activity was considerably less than previous years; for example, in 1980, 3,856 single family units were serviced.

Figure 1

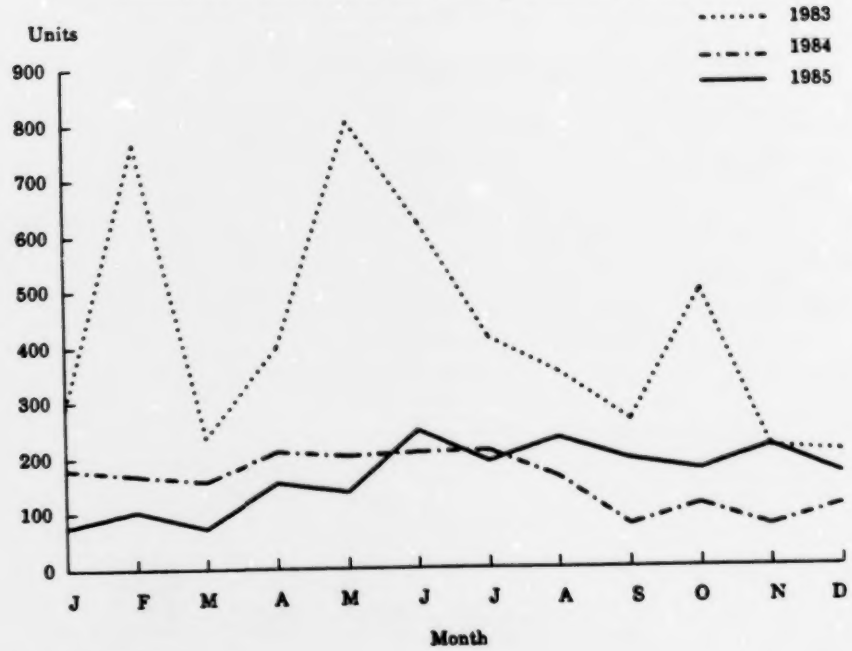
Edmonton Housing Starts by Type, 1976-1985



Source: CMHC

Figure 2

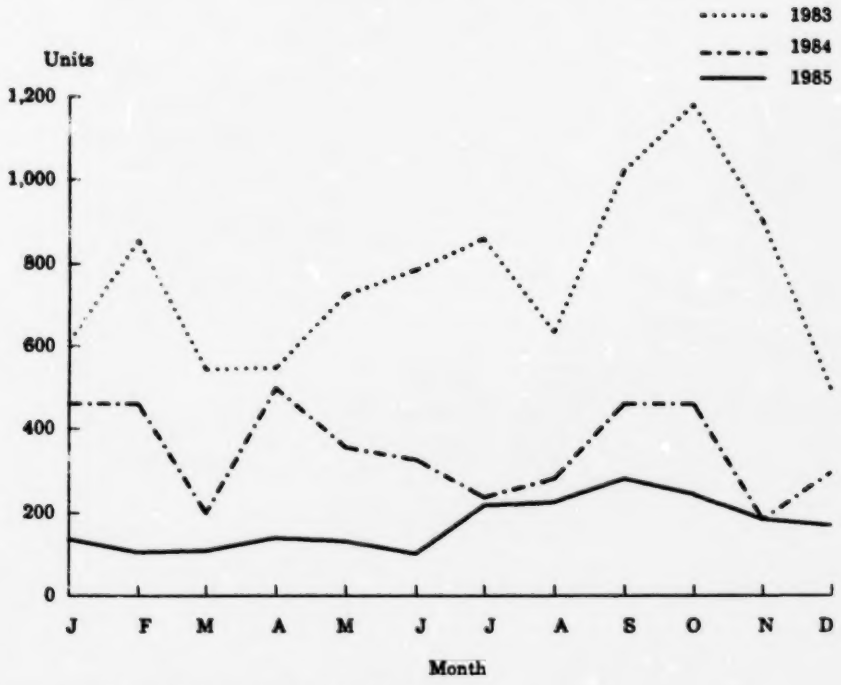
Edmonton Monthly Housing Starts, 1983-1985



Source: CMHC

Figure 3

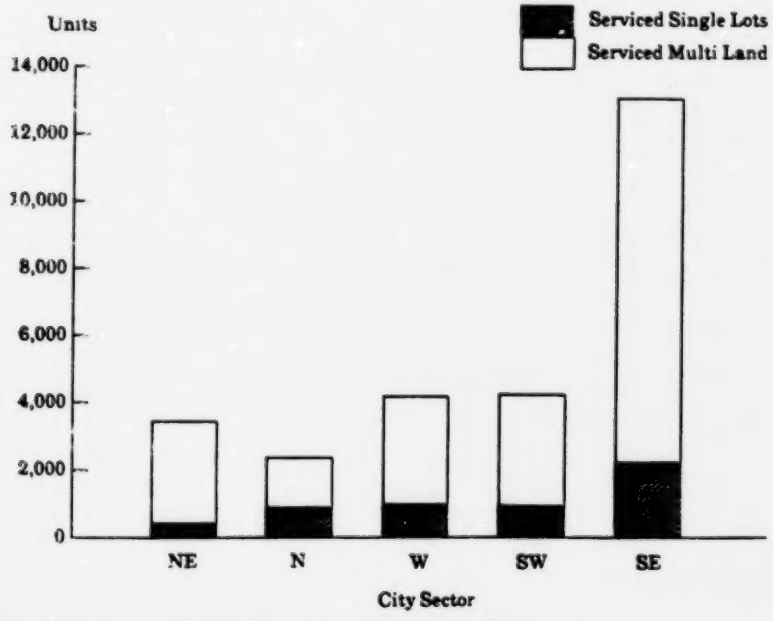
Monthly Housing Absorption, 1983-1985



Source: CMHC, and Planning and Building Department

Figure 4

Serviced Residential Land Supply



Source: Planning and Building Department, December, 1985

- Servicing has decreased sharply, reflecting the industry's desire to reduce the inventory of serviced lots.

- The 1985 servicing was distributed as follows: North 15%, West, 25%, Southwest, 52% and Southeast, 8%.

- In 1986, approximately 1,000 single family lots are expected to be serviced. The servicing will be distributed as follows: the West (42%), the Southwest (28%), the Southeast (16%) and the North (14%).

Table 2.1

City of Edmonton, Housing Starts 1976 - 1985

	Single Family		Row Housing		Apartments		Total	
Year	Units	%	Units	%	Units	%	Units	% Change Over Year Previous
1976	3,723	36	2,886	28	3,650	36	10,259	+3.8%
1977	3,207	30	2,347	22	5,097	48	10,651	+37.7%
1978	5,434	37	2,651	18	6,583	45	14,668	-33.9%
1979	4,138	43	1,503	15	4,041	42	9,682	-12.8%
1980	3,191	38	2,072	24	3,183	38	8,446	+24.5%
1981	4,046	38	2,411	23	4,058	39	10,515	-9.2%
1982	1,811	19	1,350	14	6,385	67	9,546	-46.4%
1983	3,003	59	682	13	1,436	28	5,121	-63.3%
1984	1,750	93	116	6	11	1	1,877	+4.9%
1985	1,890	96	21	1	59	3	1,970	
TOTAL	32,193	39	16,039	19	34,503	42	82,735[1]	

Source. Canada Mortgage and Housing Corporation, 1985.

[1]Total housing starts plus 1976 stock will not equal 1985 stock due to a combination of factors including demolitions, functional changes and the effects of the City annexation (which increased the total stock with no new housing starts).

Table 2.2

City of Edmonton, Housing Unit Absorption, 1982-1985

Year	Completions[1] Units	Completed and Unoccupied Inventory at Year-End Units	Absorptions[2] Units
1982			
Single Family	2,254	727	2,852
Row/Apartments	7,294	1,459	7,075
Total	9,550	2,186	9,927
1983			
Single Family	2,475	190	3,012
Row/Apartments	5,271	584	6,146
Total	7,744	774	9,156
1984			
Single Family	2,540	93	2,637
Row/Apartments	1,198	197	1,585
Total	3,738	290	4,222
1985			
Single Family	1,596	53	1,638
Row/Apartments	295	85	407
Total	1,891	138	2,045

Source: Planning and Building Department, CMHC figures.

[1]Housing completions during calendar year, CMHC.
[2]Include completions and the change in the inventory of completed and unoccupied units.

Note: Numbers may not total exactly.

Table 2.3

City of Edmonton, Residential Land Supply[1] (in units)

City Sector (see Map 1)	(1) Subdivided and Serviced	(2) Total Subdivided	(3) Approved ASPs[2] (Unserviced, Unsubdivided Land)	(4) Total
Northeast				
Single Family	462	462	6,920	7,382
Row Housing	2,026	2,026	2,300	4,326
Apartments	1,041	1,041	2,927	3,968
Total	3,529	3,529	11,525	15,676
North				
Single Family	889	966	16,345	17,311
Row Housing	856	900	8,044	8,944
Apartments	651	651	7,478	8,129
Total	2,396	2,517	31,867	34,384
West				
Single Family	1,004	1,023	1,771	2,794
Row Housing	757	757	590	2,289
Apartments	2,485	2,485	590	4,017
Total	4,246	4,265	2,951	9,100
Southwest				
Single Family	942	942	4,906	5,848
Row Housing	969	969	1,619	2,588
Apartments	2,373	2,373	1,619	3,992
Total	4,284	4,284	8,144	12,428
Southeast				
Single Family	2,249	2,248	10,422	12,670
Row Housing	2,677	2,677	3,473	6,150
Apartments	8,202	8,202	3,473	11,675
Total	13,127	13,124	17,368	30,495
Total (excluding Inner City)				
Single Family	5,545	5,641	40,364	46,005
Row Housing	7,285	7,329	16,026	23,355
Apartments	14,752	14,752	16,087	30,839
Total	27,582	27,722	71,855	99,577

Source: Planning and Building Department, June, 1986

[1]Supply measured in potential dwelling units as of December 31, 1985.
[2]Based on information from Area Structure Plans.

PART 3 - MARKET TRANSACTIONS/OUTCOMES

A series of outcomes result from the interaction of the supply of housing and the demand by households. Key market transactions are outlined here.

3.1 Real Estate Listings and Sales

The volume of market transactions (listings and sales) are illustrative of the supply of and demand for housing. With the onset of recession in 1982, the number of listings increased while the number of sales dropped substantially, resulting in a sales to listings ratio of only 25% - a sharp decline from the 1981 figure of 41% (Table 3.1). Since 1982, the sales to listings ratio has risen markedly.

- The residential real estate market showed considerable strength in 1985. Total residential listings for 1985 were 16,457 and sales were 8,867 for a sales to listings ratio of 54%.

- Despite a substantial increase in the 1985 sales to listings ratio over 1984, the average selling price in 1985 fell $5,000 to $74,175.

3.2 Rental Vacancy Rate

Rental vacancy rates rose dramatically in 1983 and 1984 but moderated in the last half of 1985.

- Vacancy rates fluctuated considerably in recent years, rising from 1.6% in October 1981 to 11.4% in April 1984 before dropping to 4.5% in April, 1986 (Table 3.2 and Figure 5).

- The vacancy rate varied greatly across the city in April, 1986 from 1.9% in the University area to a high of 7.2% in the Northeast area of the City.

- The rental vacancy rate (October, 1985) also varied by apartment type:

Bachelor	3.1%
One Bedroom	3.8%
Two Bedroom	4.7%
Three Bedroom	5.2%

Vacancy rates fluctuated so markedly because of rapid changes in the demand for and supply of apartment units. Large numbers of new units entered the market in 1982 and 1983 when demand was dropping, and when demand began to rise in 1984, construction of new apartment units had virtually ceased. Net absorption of apartment units between April, 1984 and April, 1986 has averaged about 180 units a month, while an average of only 18 units per month have been built. Given these trends, vacancy rates will probably average between 3% and 4% during 1986 (Figure 6).

3.3 Housing Costs

This section deals with the price of housing, both rental and ownership, the carrying costs of ownership and the relative affordability of housing compared to income.

Price of Ownership Housing

Table 3.3 shows the fluctuation in sales prices for two typical Mill Woods houses between 1978-1986 (April) (Royal LePage, Survey of Canadian House Prices). Mill Woods was chosen because of data availability and because the houses represent typical Edmonton homes in the modest price range. The Royal LePage data shows:

- The price of a detached bungalow rose steadily over 1978-1982 and then declined by 22% to $70,500 in in January of 1985. Since then the price increased to $81,000 in April, 1986 (Table 3.3).

- The price of the more spacious detached two storey home peaked in 1981, then declined by 26% to $95,000 in January, 1985. Since then, the price of this house type also increased, reaching $110,000 in April, 1986.

- The price of houses in other Edmonton areas show a similar trend.

Apartment Rents

- Rent for an average two bedroom apartment in the Edmonton area rose from $253 per month in 1976 to a high of $496 in 1982 or by 96% (CMHC, Rental Vacancy Survey October, 1983).

- Rents for two bedroom apartments as of April, 1986 have declined to an average of $467 per month. The average rent for other apartment types in April, 1986 were:

Bachelor	$311
One Bedroom	$380
Two Bedroom	$467
Three Bedroom	$515

- Average rents October, 1985 - April, 1986 increased between $1 - $10 per unit. These average rents do not include rental extras such as free month's rent.

Ownership Carrying Charges

The cost of housing discussion provides additional insights when it is expanded to monthly carrying charges. Table 3.4 and Figure 7 illustrate expenses and carrying charges for the Mill Woods bungalow over 1978-1986. Carrying charges include the house price, 10% down payment, mortgage insurance, mortgage rates (5 year term) and taxes.

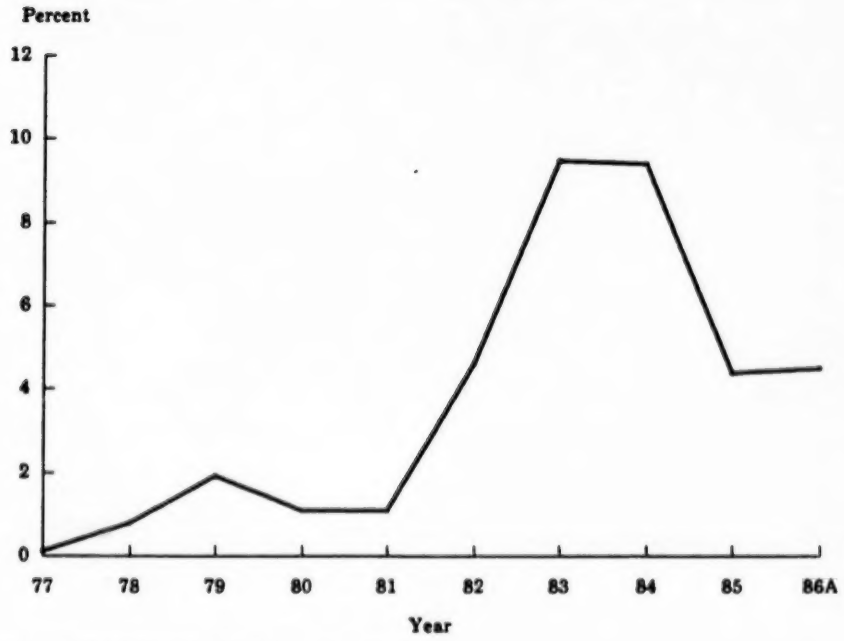
- Monthly carrying charges for a Mill Woods bungalow on April, 1986 averaged $779 per month.

- Between 1978 - 1982 carrying charges rose 100% to $1,359 per month; since then carrying charges have fallen 43% to $779 per month (Figure 7).

- Carrying charges are very sensitive to interest rate fluctuations. With fixed house prices, down payment and taxes, a 1% change in interest rates

Figure 5

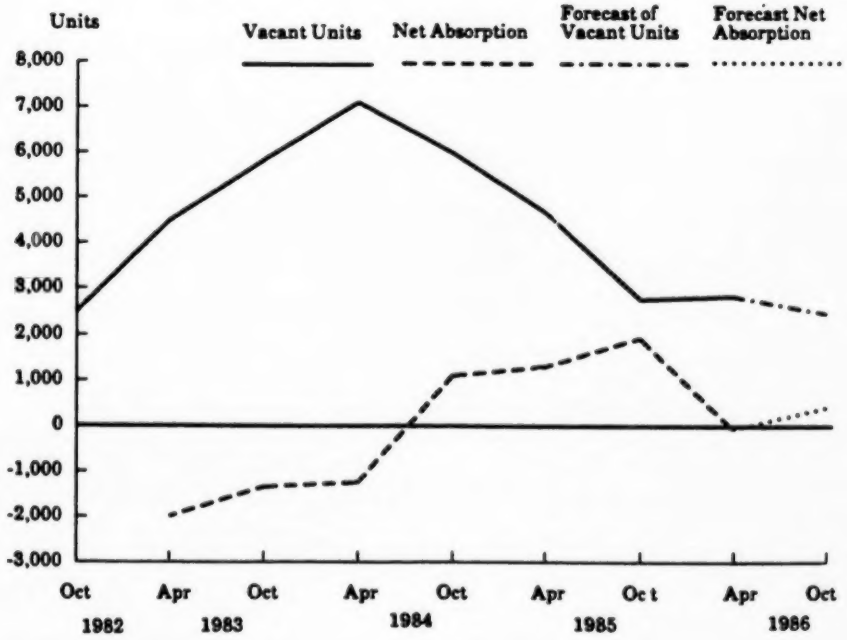
Edmonton Rental Vacancy Rate, 1977-1985



October of Each Year (April 1986 indicated by A)

Figure 6

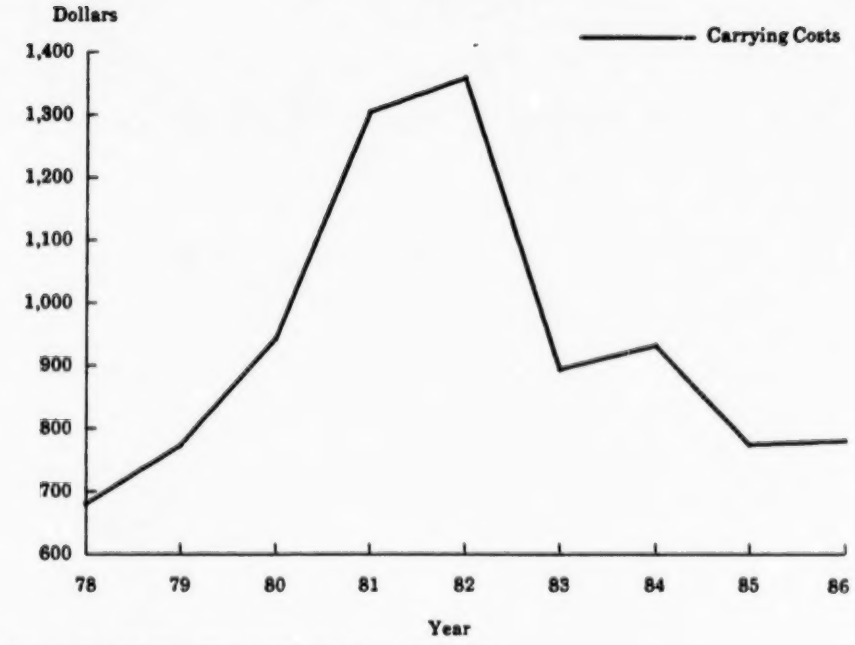
Edmonton Apartment Vacancies and Absorption, 1982-1986



Sources: CMHC and Planning and Building Department for October 1986 forecast

Figure 7

Carrying Costs, 1978-1986



Source: Royal LePage/Housing Market Report Table 3.4

causes carrying charges to increase or decrease by $53 per month on the sample house.

Affordability

This section deals with the cost of housing in relation to income. Data discussed includes median household income in Edmonton, the number of households that can afford different types of accommodation and average shelter costs.

Table 3.5 shows median household incomes in Edmonton and the Canadian consumer price index. Observations on the changes between 1981 and 1985 include:

- In nominal terms, median household income increased 20% to $31,000 in 1983, but decreased slightly to $30,800 in 1985.
- In real terms however, (accounting for inflation), median household income decreased by 4%.

A measure of affordability can be calculated by translating ownership or rental costs into yearly rates and assuming that 30% of the total gross income is spent on shelter. Using this procedure, the number of Edmonton households able to afford comfortably the shelter type can be calculated as follows:

- Monthly ownership costs of $779(1986 costs, see Table 3.4), would require a household income of $32,000. Approximately 48% of Edmonton households could comfortably afford a Mill Woods detached bungalow;
- A two bedroom rental apartment costing $459 per month would require a household income of approximately $18,300; 73% of Edmonton households could afford this shelter.

These figures are approximate calculations; alternate housing preferences and financing arrangements provide a wide array of shelter financing options. Housing is also available in Edmonton at much lower prices in the form of town houses (Castle Downs, $43,5500 or Mill Woods, $40,000) condominium apartments (Castle Downs, $15,000 or Clareview, $20,000) and rental walk-ups.

These shelter and financing options combined with available assisted housing and recently lower shelter costs make housing a generally affordable commodity in Edmonton.

3.4 City Sector Profile

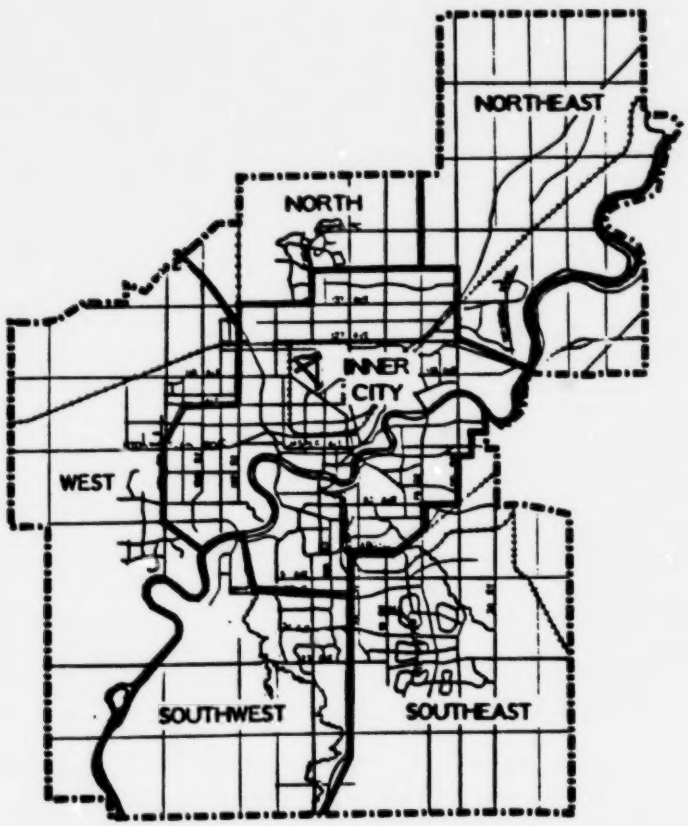
Table 3.6 summarizes housing market activity for each of the six city sectors. Map 1 outlines the boundaries of the sectors. Highlights are:

- Average house prices have risen between 4.8 and 14.8% over 1985 - 1986.
- Housing starts in 1985 show that the West Sector had the most starts followed by the Southwest and North Sectors. This distribution continues

the trend begun in 1983 that saw the focus of building activity move from the Southeast towards the West, North and Southwest.

Residential servicing reflects the distribution of building activity. Most of the 698 single family lots serviced in 1985 were in the Southwest (52%) and West (25%) sectors of the City.

MAP 1 CITY SECTORS



SOURCE: General Municipal Plan Map 5.1

Table 3.1

City of Edmonton, Real Estate Listings and Sales, 1981-1985

Year	Total Listings	Total Sales	Sales to Listing Ratio (%)	Average Price ($)
1981	18,293	7,466	41%	91,438
1982	19,451	4,873	25%	91,405
1983	19,056	5,605	29%	85,667
1984	17,955	6,002	33%	79,306
1985	16,457	8,867	54%	74,175

Source: Edmonton Real Estate Board
"Multiple Listing Service" listings only

Table 3.2

Edmonton Rental Vacancy Rate, 1977-1986

Year	Month	Vacancy Rate (in percent)[1]
1977	April	0.2
	October	0.1
1978	April	0.8
	October	0.8
1979	April	3.0
	October	1.9
1980	April	2.8
	October	1.1
1981	April	2.5
	October	1.1
1982	April	3.4
	October	4.6
1983	April	7.5
	October	9.5
1984	April	11.4
	October	9.5
1985	April	7.4
	October	4.4
1986	April	4.5

Source: CMHC

[1] CMHC survey includes private buildings containing 6 units or more.

Table 3.3

City of Edmonton, Example House Prices (in current dollars)

		Detached Bungalow[1]	Detached Two-Storey[2]
1978	June	75,000	105,000
1979	June	80,000	115,000
1980	June	88,000	125,000
1981	June	88,000	128,000
1982	July	90,000	127,000
1983	July	79,000	115,000
1984	July	73,500	102,000
1984	October	72,000	98,000
1985	January	70,500	95,000
1985	October	75,500	105,000
1986	January	77,000	107,000
1986	April	81,000	110,000

Source: Royal LePage Survey of Canadian House Prices

[1]A 3-bedroom bungalow, with one car garage, 1½ bathroom and 111 sq. metres (1,200 square feet), 5-8 years old in Mill Woods.
[2]A 4-bedroom two-storey with two car garage, 2½ bathrooms, fireplace, family room and is 186 sq. metres (2,000 square feet), 5-8 years old in Mill Woods.

Table 3.4

City of Edmonton, Monthly Carrying Charges - Ownership

	1978	1979	1980	1981	1982	1983	1984	1985	1986
House Prices[1]	$75,000	$80,000	$88,000	$88,000	$90,000	$78,000	$73,500	$70,500	$81,000
Less 10% Downpayment	7,500	8,000	8,800	8,800	9,000	7,800	7,350	7,050	8,100
Mortgage Amount	67,500	72,000	79,200	79,200	81,000	70,200	66,150	63,450	72,900
High Ratio Insurance (@ 1.5%)	1,013	1,080	1,188	1,188	1,215	1,053	992	952	1,093
Total Mortgage Amount	68,513	73,080	80,388	80,388	82,215	71,253	67,142	64,402	73,993
Interest Rate[2]	10.25%	11.25%	13.0%	19.0%	19.25%	13.5%	15.25%	12.5%	10.5%
Monthly Payment[3]	$624	$716	$886	$1,239	$1,282	$811	$849	$688	$687
Taxes[4]	56	56	57	66	77	83	83	88	92
Carrying Charge (per month)[5]	$680	$772	$943	$1,305	$1,359	$894	$932	$776	$779

[1]Royal Trust Survey of Canadian House Prices, July of each year, (except for 1985 and 1986 when April's price is used), Mill Woods Detached Bungalow
[2]5-Year term, July of each year except for 1985 and 1986 when April's rate is used.
[3]Amortized over 25 years.
[4]Assuming $1,100 annual taxes for 1986.
[5]Other costs such as utilities and maintenance are not included.

Table 3.5

City of Edmonton, Median Household Income 1976-1985

Year	Median Income (in dollars)[1]	% Change	Consumer Price Index[2]	% Change
1976	N/A		62.9	
1977	15,200		67.9	8
1978	17,800	17	73.9	9
1979	18,600	4	80.7	9
1980	22,200	19	88.9	10
1981	25,800	16	100.0	12
1982	27,300	6	110.8	11
1983	31,000	13	117.2	6
1984	30,000	-3	122.3	4
1985 (e)	30,800	2.5	124.3	3

1 Population Research Laboratory, University of Alberta, Median Household Income.
1985 estimate by Planning and Building Department based on increase on average weekly earnings.

2 Statistics Canada, Annual Average Index, all items.

Table 3.6

City of Edmonton, City Sector Description of Housing Market Activity

Description	Inner City	Northeast	North	West	Southwest	Southeast
Average Price 1986[1] (April)	N/A	$76,000	$80,000	$85,000	$110,000	$81,000
Percentage Change 1985-1986	N/A	11.8	8.8	4.9	4.8	14.8
Housing Starts 1985						
Single/Semi	25	74	530	593	514	154
GRM	3	0	0	0	18	0
Apt	50	0	0	0	9	0
Total	78	74	530	593	541	154
Share of 1985 housing starts	4%	3%	27%	30%	28%	8%
Vacant Single Lots[2]	N/A	462	889	1,004	942	2,248
Vacant Residential Land (Hectares)[3]	N/A	695	1,545	314	626	1,147
1985 Single Family lot servicing	0	0	104	172	364	58

1 Average price is for a single detached bungalow, Royal LePage.
2 Subdivided and serviced lots for single family residential units Status of Residential Land Report, 1985
3 Raw land for residential purposes in authorized and/or approved Area Structure Plans.

PART 4 - FORECASTS

This part of the report presents housing forecasts and highlights key study findings and implications.

4.1 Housing Forecast

This report uses two methods to forecast housing starts:

(i) headship rates as influenced by economic forecasts (Section 1.3);

(ii) an econometric model for forecasting housing starts (City of Edmonton Planning and Building Department, 1986).

The two different methods are used because of their complementary nature. The headship method provides only a total starts forecast based on a general, subjective relationship with economic forecasts. The econometric model provides forecasts of total, multi-family and single family starts with a specific, quantified relationship to selected economic variables.

Based on a comparison of the forecasts from the two methods and a subjective assessment of the factors influencing housing starts, a preferred forecasts is identified.

Method 1: Headship Rates Influenced by Economic Conditions

The headship rate forecasts discussed in Table 1.3 (and presented in detail in Appendix 1) provide the following forecasts of housing starts (rounded to the nearest 100):

Year	Total Starts
1986	1,700
1987	2,300
1988	3,200
1989	3,400

These forecasts mean total housing starts in 1986 in Edmonton would be lower than 1985 (1,970 units), reflecting the lower rate of headship formation in the under 35 age group. These lower rates result from the slowdown in the local economy as a result of the decline in world oil prices. There could be a modest recovery in 1987 as the economy starts to recover and interest rates remain low (City Forecast Committee, 1986). The recovery would continue in 1988 as economic growth picks up in Alberta and Edmonton. Housing starts would then remain stable in 1989.

Method 2: Econometric Model for Housing Starts

The second method forecasts single family, multi-family and total starts based on causal relationships between housing starts and socio-economic factors (City of Edmonton Planning and Building Department, 1986). A series of econometric equations were developed and tested to determine the degree to which selected economic variables explained housing starts activity.

The selected equations indicated the following relationships:

i) total housing starts in Edmonton are largely determined by the current real mortgage rate, vacancy rates from the previous year, and by real new house prices (from two years previous);

ii) single family starts are influenced most strongly by the real mortgage rate for the previous year and by changes in the real price of new housing (from two years previous);

iii) multi-family starts were calculated as the difference between total starts and single family starts (City of Edmonton Planning and Building Department, 1986).

When the economic forecasts variables for Alberta and Edmonton (City Forecast Committee, 1986) are inserted into the econometric equations, the following forecasts resulted:

Year	Single Family Starts	Multi-family Starts	Total Starts
1986	1,432	206	1,638
1987	1,319	343	1,662
1988	1,392	636	2,028
1989	1,546	821	2,367

These forecasts show that total housing starts in 1986 and 1987 would be lower than 1985 (1,970), and do not show increases until 1988 and 1989. Single starts show a similar pattern while multi starts increase throughout the forecast period. Real mortgage rates are expected to decline over this period, but the impact of falling rates is more than offset in 1986 and 1987 by the decline in real price of new houses over 1984-85. In effect, the deteriorating value of housing as a financial investment in the previous two years reduces the future demand for new housing.

In examining the ouputs from the econometric model, the forecasts for single family and total starts appear too low, while the multi-family starts are probably too high. The forecast appears to be low because the model is acting on indicators from the weak economy of 1984 and 1985. Demographic growth also influences housing starts, and the household forecasts discussed earlier indicate a higher number of housing starts than are forecast by the econometric model.

Preferred Housing Starts Forecasts

A preferred forecast of housing starts incorporating both demographic and economic variables is as follows (Figure 8).

Year	Forecast	Rationale
1986	1,800	The positive factor is lower mortgage rates. However, economic uncertainty from the oil price decline, out migration from Edmonton, higher unemployment rates and flat to declining housing prices combine to lower activity below 1985 levels.
1987	2,500	The tone of the market starts to improve as economic growth increases over 1986. Mortgage rates are stable or decline slightly, the unemployment rate declines slightly and there is some positive migration to Edmonton.
1988	3,000	A continuing improvement in the economy, combined with a slight decline in real mortgage rates and unemployment rates increase housing starts.
1989	3,200	Stability of economic variables and continued household growth increase starts slightly.

4.2 Distribution of Housing Starts

Housing starts in the years 1983 to 1985 shifted in emphasis away from the Inner City, the Northeast and the Southeast. Areas of increased growth were the West, Southwest and North. This shift is expected to continue and is reflected in the distribution of total housing starts to City Sectors in Table 4.2 and illustrated in Figure 9.

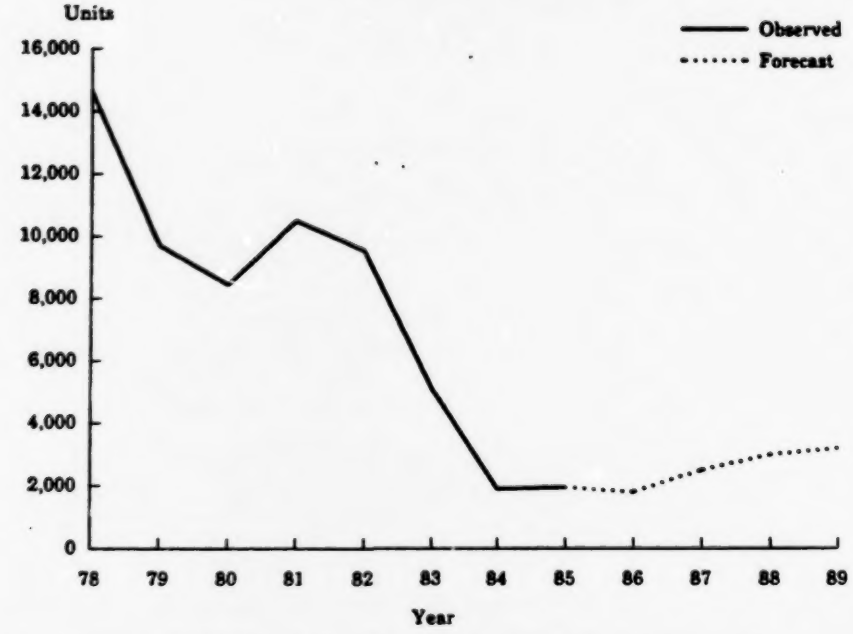
There has also been a distinct shift away from apartment and ground related multiple starts to single family/semi-detached starts (96% of total starts in 1985). This emphasis is expected to continue in 1986 and 1987 with more apartments and ground related multiples only appearing in the 1988-1989 period (Figure 9, 10).

4.3 Residential Land Supply

The supply of serviced residential land (outlined in Section 2.6), is adequate to satisfy 3.1 years demand for single family units at forecasted growth rates. The total supply of residential land (serviced and unserviced) in approved Area Structure Plans is sufficient to meet demand for single family units for 21 years. The supply of serviced land for multi-family units is in excess of 20 years supply.

Figure 8

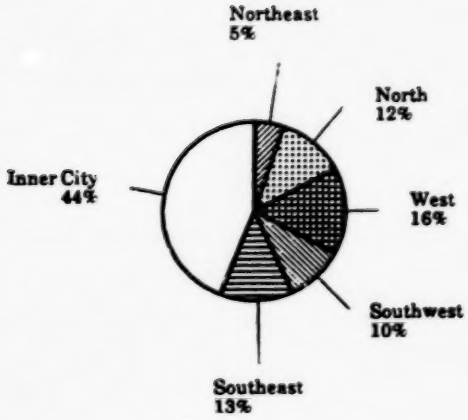
Housing Starts, 1978-1989



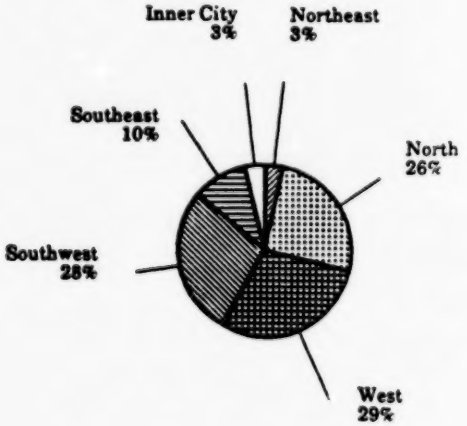
Source: CMHC (1978-1985)/Planning and Building Department Forecasts (1986-1989)

Figure 9

Distribution of Housing Starts



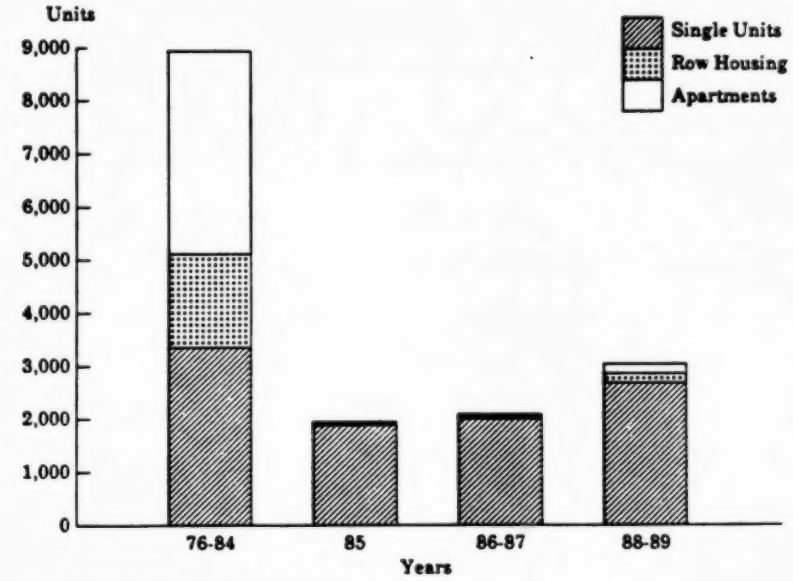
Building Permits
1982-1985



Starts Forecast
1986-1989

Figure 10

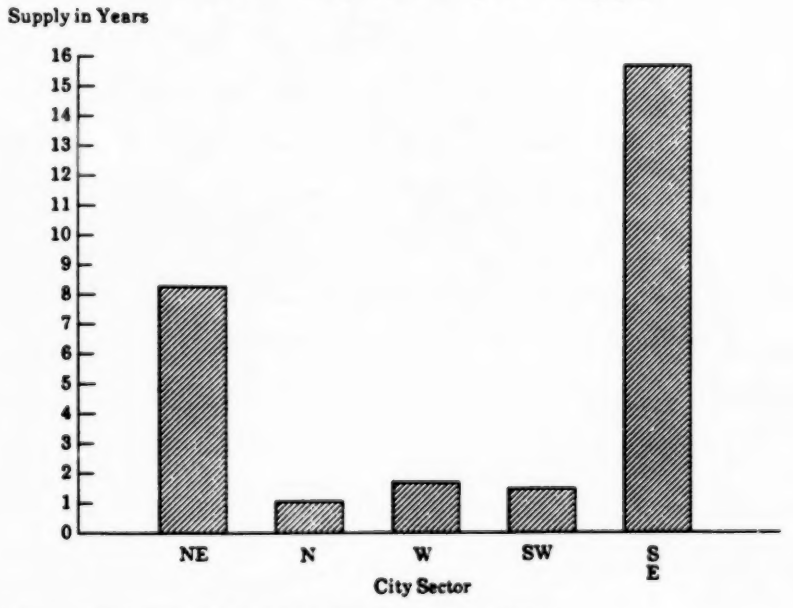
Average Housing Starts and Mix Per Year



Source: Planning and Building Department

Figure 11

Serviced Single-Family Lot Supply



Source: Planning and Building Department (December, 1985)

4.4 Serviced Land Supply Forecast by Sector

At forecasted growth rates, the supply of subdivided and serviced lots for single family units in different sectors of the City ranges from 1.2 years in the north to 16.1 years in the southeast (See Table 4.3 and Figure 11). This supply is adequate through 1986. At forecasted growth rates and present servicing rates, it can be expected that an increase in servicing rates in single family units will be required in the North, West and Southwest sectors by 1987.

Table 4.1

City of Edmonton, Population and Housing Forecast, 1976-1989

Year	Average Population Increase	Household Increase	Housing Starts (per Year)
1976-1983	+14,000		9,861
1984	+2,900 [1]	1,786	1,877
1985	+4,800 [1]	1,899	1,970
1986	+5,004	1,700	1,800
1987	+6,831	2,300	2,500
1988	+7,147	3,200	3,000
1989	+7,439	3,400	3,200

Source: Planning and Building Department, 1986

[1]Estimate

Table 4.2

City of Edmonton, Housing Starts Forecast by City Sector and Type

Sector[1]	1985	1986	1987	1988	1989
Inner City	78	70	100	120	130
Northeast	74	50	75	90	95
North	530	490	650	780	830
West	593	540	725	870	930
Southwest	541	505	700	840	895
Southeast	154	145	250	300	320
Total	1,970	1,800	2,500	3,000	3,200
Housing Type					
Single Family	1,890	1,750	2,300	2,700	2,800
Row Housing	21	50	100	150	200
Apartments	59	0	100	150	200
Total	1,970	1,800	2,500	3,000	3,200

Source: Planning and Building Department, 1986

[1]Forecasted Distribution for 1986 to 1989. See Map 1 for Sector definition.

Table 4.3

City of Edmonton, Inventory of Serviced Residential Land At the end of 1986 (in years)

City Sector	Year-end Supply 1986	Supply of Subdivided and Serviced Lots in Years[2]
NORTHEAST		
Single Family	414	8.3
Row Housing	2,024	+20
Apartments	1,041	+20
NORTH		
Single Family	554	1.1
Row Housing	841	+20
Apartments	651	+20
WEST		
Single Family	915	1.7
Row Housing	741	+20
Apartments	2,485	+20
SOUTHWEST		
Single Family	742	1.5
Row Housings	954	+20
Apartments	2,373	+20
SOUTHEAST		
Single Family	2,277	15.7
Row Housing	2,673	+20
Apartments	8,202	+20

Source: Planning and Building Department, July 1986

[1]Calculated by taking the 1985 year end supply, adding 1986 forecasted servicing and subtracting 1986 forecasted housing starts.
[2]Calculated by dwelling type by dividing the potential units on subdivided and serviced lots by the forecast of housing starts by sector by type for 1986 (Table 4.2).

APPENDIX

City of Edmonton
Household Growth 1983-1989

Age Group	1983 Population	1983 Headship Rate	1983 Households	1984 Population	1984 Headship Rate	1984 Households	1985 Population	1985 Headship Rate	1985 Households
15-24	123,106	0.245	30,161	115,727	0.240	27,774	110,838	0.235	26,047
25-34	123,318	0.515	63,509	125,616	0.513	64,441	127,158	0.51	64,851
35-44	66,663	0.555	36,998	69,231	0.555	38,423	71,958	0.55	39,793
45-54	52,668	0.565	29,757	52,350	0.565	29,578	51,903	0.57	29,325
55-64	41,149	0.575	23,661	42,831	0.575	24,628	44,309	0.58	25,478
65+	39,415	0.600	23,649	41,127	0.600	24,676	43,210	0.60	25,926
TOTAL	446,319	0.465	207,735	446,882	0.469	209,520	449,376	0.47	211,419
INCREASE				563		1,786	2,494		1,899

Age Group	1986 Population	1986 Headship Rate	1986 Households	1987 Population	1987 Headship Rate	1987 Households	1988 Population	1988 Headship Rate	1988 Households
15-24	106495	0.230	24,494	103,199	0.224	23,117	99,731	0.222	22140
25-34	127847	0.507	64,818	128,716	0.505	65,002	128,857	0.504	64944
35-44	75155	0.550	41,335	78,925	0.549	43,330	83,174	0.548	45579
45-54	51511	0.564	29,052	51,507	0.563	28,998	51,956	0.562	29199
55-64	45103	0.574	25,889	45,158	0.573	25,876	45,455	0.572	26000
65+	45969	0.599	27,535	48,699	0.598	29,122	51,517	0.597	30756
TOTAL	452080	0.471	213,124	456,204	0.472	215,444	460,690	0.475	218619
INCREASE			1,705	4,124		2,320	4,486		3175

Age Group	1989 Population	1989 Headship Rate	1989 Households
15-24	96,579	0.219	21,151
25-34	127,556	0.503	64,161
35-44	88,292	0.547	48,296
45-54	52,737	0.562	29,638
55-64	45,800	0.571	26,152
65+	54,677	0.596	32,587
TOTAL	465,641	0.477	221,985
INCREASE			3,366

HOUSING DATA SOURCES

	SOURCE	DATA
1.	Canada Mortgage and Housing Corporation	Housing Statistics Report (Monthly) - housing starts, under construction, completions, absorption rates and inventory of newly completed and unoccupied units Rental Vacancy Survey (Semi-Annually) - rental vacancy rates and average rental prices
2.	Statistics Canada	Census Data (Every 5 Years): - head of household by age cohort - family/non-family households New House Price Index (Monthly) - index of the price of new housing by land and building components
3.	City of Edmonton	Status of Residential Land Report (Annually): - building permits issued - inventory of vacant lots at various stages of development by neighbourhood Key Demographic Indicators of Edmonton, 1984, Report (Periodically): - detailed population increase and profile data for the 12 Edmonton Districts and 244 neighbourhoods - population projections for Edmonton to the year 2001 Residential Population Densities in Edmonton (Periodically): - persons per dwelling unit data for each land use districts by unit type

		Population Projections for the City of Edmonton 1984-2001 - population forecast including age distribution - migration, birth and death rates City Forecast Committee (Periodically) - forecast of socio-economic variables A Housing Starts Forecasting Model for Edmonton (Research Paper No. 2) - an econometric model of housing starts in Edmonton Residential Staging Information, (Semi-Annually) - evaluates the supply of and demand for residential land by sector of the City
4.	Royal Trust Realtor	Survey of Canadian House Prices (Quarterly): - average price data for several housing types in several neighbourhoods of Cities across Canada
5.	Population Research Laboratory - University of Alberta	Socio-Economic Survey (Annually): - population, income and shelter costs in Edmonton
6.	Edmonton Real Estate Board	Multiple Listing Service Data (Monthly): - detailed listings, sales price and sales type data for MLS
7.	Royal LePage	Canadian Real Estate - Market Survey (Annually): - analysis of real estate investment opportunities
8.	Province of Alberta Department of Planning	Residential Mortgage Foreclosures Data: Residential Construction Survey (Monthly) - housing starts, vacancy rates for urban places in Alberta
9.	Lawrence Smith	'Household Headship Rates, Household Formation, and Housing Demand in Canada' Land Economics, Vol. 60, No. 2, May, 1984